

Plant about 15 cm. high, few-branched above, the branches long and divergent; leaves opposite; petioles of the larger leaves slender, 8–13 mm. long, narrowly marginate above, hirsutulous on margin; blades of the larger leaves rhombic-ovate, 2–3.2 cm. long, 1.2–2.3 cm. wide, acute, acutely cuneate at base, crenate-serrate above the entire cuneate base (teeth 5–7 pairs), triplinerved, sparsely hirsute-pilose above and on margin, beneath scarcely paler and practically glabrous; branch leaves smaller, short-petioled, often obtuse; heads about 4 mm. wide in anthesis; outer phyllaries 5, oval or oval-oblong, membranous-herbaceous, free nearly to base, obtuse or rounded, ciliate, about 5-nerved, 2–2.5 mm. long, 1.2–1.8 mm. wide; rays probably 5, greenish-yellow, bidentate, 3-nerved, about 1.3 mm. long, much shorter than the body of the fruit appendage; disk flowers about 3, their corollas greenish yellow, 1.3 mm. long, 4 or 5-toothed, the teeth bearing an internal apical tuft of hairs; pales oval, obtuse, scarious, glabrous, 1.3 mm. long, bearing a subterminal oblong central gland; fruit body ribbed and corrugate on the sides, about 1.5 mm. long, 1.3 mm. wide, the hood ovate, sparsely hispidulous-ciliate, sometimes muticous, obtuse, and about 1.2 mm. long, usually acuminate, about 2 mm. long and 1.6 mm. wide, and prolonged into a slender recurved sparsely hispidulous horn about 3.5 mm. long.

MEXICO: Alzada, Colima, 4 Nov. 1910, *C. R. Orcutt* 6601 (TYPE no. 1,209,590, U. S. Nat. Herb.).

Related to *Melampodium longicornu* A. Gray, which has similar heads and fruit, but is distinguished by its narrowly elliptic to lance-elliptic, sessile or subsessile leaves.

BOTANY.—*Venezuelan species of Valeriana, section Porteria*.<sup>1</sup> H. PITTIER, Caracas, Venezuela, and E. P. KILLIP, U. S. National Museum.

Two genera of the family Valerianaceae, *Porteria* Hook. and *Amblyorhinum* Turcz., were proposed in the year 1852, the former antedating the latter by a few months. A single species, *Porteria bractescens*, was described<sup>2</sup> by Hooker; five species were published<sup>3</sup> under *Amblyorhinum*. Both Hooker's *P. bractescens* and the first species mentioned under *Amblyorhinum* by Turczaninow, *A. grandiflorum*, which should be considered the type of this genus, were based on Linden's 424, from Caracas. Turczaninow, after he had prepared the manuscript of his paper, evidently became aware of Hooker's article, for he added a paragraph (p. 173) in which he changed the name of his first species to *Porteria bractescens*, and transferred the five other species to *Porteria*.

The characters which Hooker especially emphasizes in describing *Porteria* are the large imbricate bracts which almost completely con-

<sup>1</sup> Received July 3, 1926. Published by permission of the Secretary of the Smithsonian Institution.

<sup>2</sup> Hook. Icon. Pl. 9: pl. 864. 1852.

<sup>3</sup> Bull. Soc. Nat. Moscon. 25: 173. 1852.

ceal the flowers, the bract-like leaves, the truncate, saucer-shaped epappose calyx-limb, inclined to the side, the attachment of the corolla laterally, its base forming a blunt spur, and, finally, the general shrubby aspect of the plant.

In an account<sup>4</sup> of South American Valerianaceae published in 1857, Weddell, evidently unaware of Turczaninow's work, described three new species in the genus *Phyllactis* Pers. (Group B), one of which, *Phyllactis cordifolia*, was based on Funck and Schlim's 1623, the type of *Amblyorhinum* (= *Porteria*) *spicatum* Turcz. The two other species were *Phyllactis mutisiana* and *P. pinnatifida*, both from Colombia.

As originally understood by Persoon,<sup>5</sup> *Phyllactis* included only stemless plants, with rosette leaves, involucrate flowers having a 3-lobed corolla, and epappose fruit. The extension of *Phyllactis*, either as a distinct genus or as subgenus of *Valeriana*, to include the species which we are discussing, is hardly justifiable.

Höck, in an elaborate monograph<sup>6</sup> of Valerianaceae, reunited *Phyllactis* and *Valeriana*, dividing the species enumerated by Weddell under *Phyllactis* among four sections. In the section *Porteria* was placed correctly *Valeriana bractescens* (Hook.) Höck; but Höck unfortunately included certain Ecuadorean species with a well-developed, pappose calyx.

Graebner's synopsis of Valerianaceae<sup>7</sup> contributed little to the correct interpretation of this particular group, for in his section of *Valeriana* to which he gave the name *Porteria* not a single one of the species originally described by Hooker or Turczaninow was mentioned.

It remained for Briquet in 1914<sup>8</sup> to formulate the most satisfactory interpretation of this group, and, in the main, the present paper is in accord with his treatment.

The question as to whether this small group of species, confined probably to the mountainous region of western Venezuela and eastern Colombia, constitutes a genus distinct from *Valeriana* or whether it is treated best as a well-marked section is difficult to determine at present. The calyx of *Valeriana* (wide sense) varies greatly, and these variations are not clearly associated with other characters. The spur near the base of the corolla tube, prominent in the original

<sup>4</sup> *Chloris Andina* 2: 28. 1857.

<sup>5</sup> *Syn.* 1: 39. 1805.

<sup>6</sup> *Bot. Jahrb. Engler* 3: 57. 1882.

<sup>7</sup> *Bot. Jahrb. Engler* 37: 445, 476. 1906.

<sup>8</sup> *Ann. Conserv. Jard. Bot. Genève* 17: 349-356. 1914.

species of the group, is much reduced in the other species; in at least two species it is scarcely more pronounced than in *Valeriana rusbyi*, *V. simplex*, *V. lyrata*, or *V. urticifolia* of various other sections. As Briquet observes, a restoration of the genus *Porteria* should be made only in a general monograph of Valerianaceae, based upon a complete study of the material in the large herbaria.

Recently certain species of this group have been re-collected in Venezuela, thus supplying data additional to those in Briquet's synopsis, and one new species has been found. It seems advisable to publish this information at the present time. Mr. Killip has had the opportunity of examining material of this group in several European herbaria.

#### KEY TO THE VENEZUELAN SPECIES

Leaves 2.5 cm. long or less.

Leaves attenuate to a short petiole, crenulate or entire, more or less divaricate; corolla white; branches puberulent.

Corolla 6–8 mm. long; leaves crenulate, not ciliate. .1. *V. phyllicoides*.

Corolla 4–6 mm. long; leaves entire, minutely ciliate. .2. *V. parviflora*.

Leaves sessile, crenulate, appressed; corolla deep yellow; branches glabrous. . . . .3. *V. spicata*.

Leaves more than 2.5 cm. long.

Leaves serrate or crenulate; corolla 1 cm. long or less.

Bracts entire, 7 mm. long or less; leaves oblong-linear, acute

4. *V. triplinervis*.

Bracts remotely dentate, 8–10 mm long; leaves obovate-oblong

5. *V. foliosa*.

Leaves entire; corolla more than 1 cm. long.

Bracts subcordate, 2 cm. wide or more; leaves broadly lanceolate

6. *V. bractescens*.

Bracts linear-oblong, 0.5–1 cm. wide; leaves linear-lanceolate

7. *V. meridana*.

1. VALERIANA PHYLICOIDES (Turcz.) Briq. Ann. Conserv. Bot. Jard. Genève 17: 355. 1914. Fig. 1.

*Amblyorhinum phyllicoides* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 171. 1852.

*Porteria phyllicoides* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 173. 1852.

*Porteria parviflora* var. Trev. Bot. Zeit. 11: 354. 1853.

Sierra Nevada de Mérida, 3250 m., June, 1847, *Funck & Schlim* 1529 (Paris, Geneva; type). Sierra Nevada de Santo Domingo, Mérida, 3600 m., Sept. 12, 1922, *Jahn* 1092 (Caracas, U. S. N. M.). Between Caracas and Mérida, *Linden* 365, in part (Paris).

2. VALERIANA PARVIFLORA (Trev.) Höck, Bot. Jahrb. Engler 3: 57. 1882. Fig. 2.

*Porteria parviflora* Trev. Bot. Zeit. 11: 354. 1853.

Between Caracas and Mérida, in 1843, *Linden* 365, in part (Paris, Geneva; type). Páramo de Piedras Blancas Mérida, 4000 m., Nov. 27, 1915, *Jahn* 425 (Caracas). Páramo de Timotes, 3000–4000 m., Sept. 4, 1921, *Jahn* 547 (Caracas), Jan. 21, 1922, *Jahn* 835 (Caracas, U. S. N. M.).

*Valeriana parviflora* is certainly distinct from *V. phyllicoides*. The leaves are entire, usually minutely pubescent near the margin (floral leaves or bracts ciliate), and loosely imbricate; in *V. phyllicoides* they are distinctly crenulate, glabrous throughout, and closely imbricate.

In the herbarium of the Muséum d'Histoire Naturelle, Paris, there is a specimen of *Linden* 365, which corresponds excellently with the description of *V. parviflora* and with *Jahn's* 835, which was taken to Europe for comparison. On another sheet at Paris two collections are mounted, *Funck & Schlim* 1529, and another *Linden* plant, the label of which bears the same locality data as the *Linden* 365 sheet; a small slip with the number "365" is pasted on this sheet with the two specimens. The two plants appear to belong to the same species; they are not of the same species as the *Linden* 365 which is mounted by itself; they agree well with *Jahn's* 1092 which was likewise taken over for comparison. Probably *Linden* collected two distinct species under his no. 365, but possibly the slip with the number 365 has been placed wrongly on the sheet.

3. VALERIANA SPICATA (Turcz.) Briq. Ann. Conserv. Bot. Jard. Genève 17: 354. 1914. Fig. 7.

*Amblyorhinum spicatum* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 170. 1852.

*Porteria spicata* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 173. 1852.

*Phyllactis cordifolia* Wedd. Chlor. And. 2: 32. 1857.

*Porteria rotundifolia* Karst. Fl. Columb. 2: 99. pl. 151, f. 8-10. 1862-69.

*Valeriana cordifolia* Höck, Bot. Jahrb. Engler 3: 54. 1882.

Sierra Nevada de Mérida, 3250 m., June, 1847, *Funck & Schlim*, 1623 (Paris, Geneva; type, also type of *Phyllactis cordifolia*). *Trujillo*, *Linden* 411 (Geneva).

4. VALERIANA TRIPLINERVIS (Turcz.) Briq. Ann. Conserv. Bot. Jard. Genève 17: 353. 1914. Fig. 5.

*Amblyorhinum triplinerve* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 170. 1852.

*Porteria triplinervis* Turcz. Bull. Soc. Bot. Moscou 25<sup>2</sup>: 173. 1852.

Sierra Nevada de Mérida, Mérida, 3350 m., June, 1847, *Funck & Schlim* 1551 (Paris, Geneva; type).

5. *Valeriana foliosa* Pittier & Killip, sp. nov. Figs. 3, 4.

Planta fruticosa, trunco brevi vel brevissimo, 2-3-furcato, caulibus basi aphyllis glaberrimis, supra breve ramosis dense foliosis plus minusve rufopilosis; foliis subcoriaceis, sessilibus, semi-amplexicaulibus, obovato-oblongis, basin versus attenuatis, apice subacutis, apicem versus serratis, trinerviis nervibus penniveniis, supra glaberrimis subtus ad nervos pilosis; inflorescentiis terminalibus, brevibus, dense bracteosis; bracteis ovatis, reticulatis, supra glaberrimis, lucidis, subtus ad nervos pilosis, margine sinuato-dentatis, ciliatis; bracteolis lanceolatis sparse pilosulis, interdum remote dentatis; floribus sessilibus, calyce glabro, apice limbo angustissimo minute sinuato coronato; corolla albobirescente, bracteis brevior, apice 5-lobulata, extus glabra intus sparse pilosa; staminibus inclusis; stylo apice breve trilobulato; caetera ignota.

Caulis 30-50 cm. altus, 0.5 cm. crassus. Folia 3-5 cm. longa, 0.7-1.3 cm. lata. Bracteae 1.4 cm. longae, 0.8-1 cm. latae; bracteolae basi leviter



Fig. 1.—*Valeriana phylicoides* (Jahn 1092); 2.—*V. parviflora* (Linden 363); 3, 4.—*V. foliosa* (type). (1, 2, 3, about  $\frac{1}{3}$  nat. size; 4, 1.5 nat. size.)



Fig. 5.—*Valeriana triplinervis* (F. & S. 1551); 6.—*V. meridana* (F. & S. 1540); 7.—*V. spicata* (F. & S. 1623); 8.—*V. bractescens* (Linden 424). (All about  $\frac{1}{3}$  nat. size.)

connatae usque ad 7.5 mm. longae, 1.4 mm. latae; calyx circa 2 mm. longus. Corolla 6-8 mm. longa.

Type in the U. S. National Herbarium, no. 1,186,558, collected on the Páramo de Quirorá, Mérida, Venezuela, altitude 3200 meters, October 8, 1921, by A. Jahn (no. 718).

This species belongs to the large-leaved group, from the other members of which it is distinguished by serrate leaves, hirsute on the nervation beneath, dentate bracts, and by the dimensions of the flower. Unfortunately, the meager specimens at hand give only a poor idea of the general appearance of the plant. Dr. Jahn describes it as being formed of two or three stems issuing from a very short trunk, or from a trunkless rootstock, and not more than 50 cm. high.

6. VALERIANA BRACDESCENS (Hook.) Höck, Bot. Jahrb. Engler **3**: 57. 1882. Fig. 8.

*Porteria bractescens* Hook. Icon. Pl. **9**: pl. 864. 1852.

*Amblyorhinum grandiflorum* Turcz. Bull. Soc. Bot. Moscou **25**<sup>2</sup>: 168. 1852.

Sierra Nevada de Mérida, 3000 m., in 1842, *Linden* 424 (Kew, Paris; type, also type of *Amblyorhinum grandiflorum*); *Funck & Schlim* 1515 (Paris, Geneva).

7. VALERIANA MERIDANA Briq. Ann. Conserv. Bot. Jard. Genève **17**: 353. 1914. Fig. 6.

*Amblyorhinum angustifolium* Turcz. Bull. Soc. Bot. Moscou **25**<sup>2</sup>: 169. 1852. Not *Valeriana angustifolia* Mill., 1768.

*Porteria bractescens* var. Trev. Bot. Zeit. **11**: 354. 1853.

Sierra Nevada de Mérida, 2800-3300 m., *Funck & Schlim* 1540 (Paris, Geneva; type).

In addition to these Venezuelan species, two Colombian plants, *V. mutisiana* (Wedd.) Höck and *V. karstenii* Briq. (*Porteria pubescens* Karst.), perhaps belong to this section.

## PROCEEDINGS OF THE ACADEMY AND AFFILIATED SOCIETIES

### BIOLOGICAL SOCIETY

#### 691ST MEETING

The 691st meeting of the Biological Society was held in the new assembly hall of the Cosmos Club March 27, 1926, at 8:10 p.m., with President OBERHOLSER in the chair and 80 persons present. New members elected: Mrs. MAY C. WILLIAMS SETTLE, Colonel R. MEINERTZHAGEN.

The secretary read the changes in the By-laws proposed by the committee appointed to consider this subject, consisting of H. H. T. JACKSON, Chairman, T. E. SNYDER, and B. H. SWALES. The proposed changes were passed unanimously. These changes in the By-laws are worded as follows:

That the words "The President shall not be eligible for immediate re-election" be stricken from the first paragraph, Art. II, of the By-Laws, so that the paragraph shall read: "The President shall preside at the meetings of the Society and of the Council.